

CLAIMS

What is claimed is:

1. A terminal for receiving and re-transmitting information, the terminal including:
 - a first network adapter configured to receive a primary data stream in which the information has been encoded, encrypted according to a key scheme from a primary transmitter through a first network in a first format;
 - an arrangement configured to receive entitlement messages, enabling an authorised receiver to decrypt the encrypted data stream; and
 - at least one further network adapter for connection to a secondary network, wherein the terminal is configured to re-transmit at least part of the information in at least one secondary data stream in a second format, differing from the first format, through the second network to at least one secondary terminal connected to the secondary network, wherein the terminal is configured to transmit the secondary data stream(s) encrypted according to the same key scheme and to forward received entitlement messages that enable an authorised receiver to decrypt the secondary data stream(s) to the secondary terminal(s).
2. The terminal according to claim 1, wherein the terminal is arranged to decrypt the received primary data stream and to encrypt the secondary data stream(s) according to the key scheme.
3. The terminal according to claim 2, wherein the terminal is arranged to de-multiplex a decrypted data stream comprising multiple elementary data streams, and to re-transmit information encoded in a subset of the elementary data streams.
4. The terminal according to claim 3, wherein the terminal is arranged to receive selection commands from the secondary terminals, and to select the elementary data streams comprised in the subset according to the selection commands.
5. The terminal according to claim 1, wherein the terminal is arranged to receive the encrypted primary data stream in a first data packet format, and to transmit at least one of the secondary streams in a second data packet format.

6. The terminal according to claim 5, wherein the terminal is arranged to decrypt a payload of a received encrypted data packet in the first data packet format, to form clear data from the decrypted payload, and to subsequently re-packetise the clear data to conform to the second data packet format.
7. The terminal according to claim 5, wherein the terminal is arranged to de-multiplex an encrypted data stream comprising multiple encrypted elementary data streams, and to retransmit a subset of the elementary data streams.
8. The terminal according to claim 1, wherein the terminal is arranged to include one or more addresses, identifying one or more secondary terminals, in the transmitted secondary data stream(s).
9. The terminal according to claim 1, wherein the terminal is arranged to receive the primary data stream comprising information encoded in a first format, to re-encode the information in a second format, and to include data comprising the re-encoded information in at least one of the secondary data streams.
10. The terminal according to claim 1, wherein the terminal is arranged to receive the primary data stream comprising data compressed in accordance with a first scheme, to de-compress the data, to re-compress the data in accordance with a second scheme, and to include the re-compressed data in at least one of the secondary data streams.
11. The terminal according to claim 1, arranged to receive messages authorising transmission of at least one of the secondary data streams to at least one of the secondary terminals, which terminal is arranged to transmit only those secondary data streams to those secondary terminals for which an authorisation has been received.
12. The terminal according to claim 1, comprising an arrangement for receiving a plurality of different entitlement messages, each enabling an authorised receiver to decrypt an encrypted data stream encrypted according to the key scheme, wherein each entitlement message comprises a specification of at least one terminal, wherein the terminal is arranged to forward to a secondary terminal only those entitlement messages comprising a specification to which the secondary terminal conforms.
13. A digital data distribution system, including:
 - a primary network;

a primary data transmitter, connected to the primary network and arranged to transmit information encoded in an encrypted primary data stream, encrypted according to a key scheme, through the primary network in a first format;

an entitlement message transmitter, arranged to transmit entitlement messages enabling an authorised receiver to decrypt the encrypted data stream;

a secondary network;

one or more secondary terminals, connected to the secondary network; and

a primary terminal, connected to the first and the second network, arranged to receive the encrypted data stream from the primary data transmitter through the first network and to re-transmit at least part of the information, encoded in at least one secondary data stream in a second format, differing from the first format, to one or more secondary terminals connected to the secondary network, wherein the primary terminal is configured to transmit the secondary data stream(s) encrypted according to the same key scheme and to forward received entitlement messages that enable an authorised receiver to decrypt the secondary data stream(s) to the secondary terminal(s).

14. A method of receiving and re-transmitting digital data, the method including:

receiving information encoded in an encrypted primary data stream encrypted according to a key scheme from a primary transmitter through a primary network in a first format;

receiving entitlement messages, enabling an authorised receiver to decrypt the encrypted data stream; and

re-transmitting at least part of the information, encoded in at least one secondary data stream in a second format, differing from the first format, to at least one secondary terminal through a secondary network, wherein the secondary data stream(s) are transmitted encrypted according to the same key scheme and received entitlement messages that enable an authorised receiver to decrypt the secondary data stream(s) are forwarded to the secondary terminal(s).

15. A machine readable medium storing a set of instructions that, when executed by a machine, cause the machine to execute a method to receive and re-transmit digital data, the method including:

receiving information encoded in an encrypted primary data stream encrypted according to a key scheme from a primary transmitter through a primary network in a first format;

receiving entitlement messages, enabling an authorised receiver to decrypt the encrypted data stream; and

re-transmitting at least part of the information, encoded in at least one secondary data stream in a second format, differing from the first format, to at least one secondary terminal through a secondary network, wherein the secondary data stream(s) are transmitted encrypted according to the same key scheme and received entitlement messages that enable an authorised receiver to decrypt the secondary data stream(s) are forwarded to the secondary terminal(s).